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**A STUDY ON THE ACQUISITION OF CHINESE DIRECTIONAL  
COMPLEMENTS**

A Thesis Presented

by

**LIN LIN**

Submitted to the Graduate School of the  
University of Massachusetts Amherst in partial fulfillment  
of the requirements for the degree of

MASTER OF ARTS

SEPTEMBER 2014

Department of Languages, Literatures, and Cultures

Asian Languages and Literatures

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**A STUDY ON THE ACQUISITION OF CHINESE DIRECTIONAL  
COMPLEMENTS**

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## **ABSTRACT**

### **A STUDY ON THE ACQUISITION OF CHINESE DIRECTIONAL COMPLEMENTS**

**SEPTEMBER 2014**

**LIN LIN, B.A., FUZHOU UNIVERSITY**

**M.A., UNIVERSITY OF MASSACHUSETTS AMHERST**

**Directed by: Professor Zhijun Wang**

This paper adopted second language acquisition theories and research methods to investigate how second-language (L2) Chinese learners acquire Chinese directional complements (DCs). It included two main parts: a corpus study and a questionnaire survey.

The corpus came from the compositions of 47 Chinese learners at intermediate and advanced levels at a New England university. And the data also included the questionnaire survey of 82 novice, intermediate, and advanced levels' Chinese learners and 15 native Chinese speakers who study in the same university.

The corpus study shows that L2 learners at intermediate and advanced level preferred to use DCs with extended meanings. Moreover, they preferred to combine verb with DC as an entirety rather than placing the object between verb and DC.

The error analysis based on the survey data shows that omission errors of DCs accounted for the largest percentage, the percentage of misordering errors and misuse errors were very close, and addition errors were limited.

Moreover, a relative acquisition sequence was constructed according to accuracy rate and the usage rate. This acquisition sequence reflects several phenomena: 1) the position of the object influenced the acquisition significantly; 2) some errors were caused

by interlingual transfer 3) DCs with extended meanings were easier than DCs with directional meanings in some cases; 4) the type of DC was not an important factor to affect the acquisition sequence; 5) L2 learners' comprehension competence was better than the expression competence at all level; 6)and some DC patterns' average accuracy increased at higher level, however, the errors of certain DC patterns were fossilized.

Since the presentation of the DCs in the textbooks can impact the acquisition. The researcher evaluated the presentation of DCs in participants' textbooks. There were some deficiencies, such as overwhelming introduction in one lesson, repeating introduction of the same DC, and so on. At last, some implications to teaching DCs were provided based on the findings in previous chapters.

## TABLE OF CONTENTS

	Page
ACKNOWLEDGMENTS .....	IV
ABSTRACT .....	V
LIST OF TABLES .....	IX
LIST OF FIGURES .....	X
CHAPTER	
1. INTRODUCTION .....	1
1.1 Background and Previous Study Review .....	1
1.2 The Goal and Significance of this Thesis .....	5
1.3 The Introduction of Hypotheses and Research Methods.....	6
1.3.1 Hypotheses .....	6
1.3.2 The Research Methods.....	10
2. THE COMPLEXITY OF CHINESE DIRECTIONAL COMPLEMENTS.....	11
2.1 Classification of Chinese DCs .....	11
2.2 Semantics Complexity of DCs.....	15
2.3 Syntactic Complexity of DCs .....	16
3. CORPUS STUDY ON THE CHINESE DIRECTIONAL COMPLEMENTS .....	22
3.1 Participants and Data Collection.....	22
3.2 Data Analysis .....	22
3.3 Discussion.....	30
4. A SURVEY ON THE CHINESE DIRECTIONAL COMPLEMENTS.....	32
4.1 Participant and Data Collection .....	32
4.2 Results .....	33
4.2.1 The Performance of Chinese DCs .....	33
4.2.2 Error Analysis.....	44



4.3 Discussion.....	49
4.3.1 The Beginner’s Acquisition Sequence of DCs with Directional Meanings.....	49
4.3.2 The General Acquisition Sequence of Chinese DCs .....	52
5. PEDAGOGICAL IMPLICATIONS.....	57
5.1 The Evaluation of Textbook Presentation .....	57
5.2 The Implications to Teaching .....	62
6. THE CONCLUSION AND LIMITATION .....	65
6.1 The Conclusion .....	65
6.2 The Limitation .....	66
APPENDICES	
A. QUESTIONNAIRE FOR LEARNER .....	68
B. QUESTIONNAIRE FOR NATIVE CHINESE SPEAKER.....	71
BIBLIOGRAPHY .....	74

## LIST OF TABLES

Table	Page
1. The Semantic Features of Type Shang Verbs.....	14
2. Performance on Each DCs in Compositions .....	23
3. Performance on DC Syntactic Patterns in Compositions .....	29
4. The Comprehension Performance of DCs with Directional Meanings .....	35
5. The Performance of Translation I .....	36
6.The Expression Performance of DCs with Directional Meanings.....	38
7.The Comprehension Performance of DCs with Extended Meanings .....	41
8. The Performance of Translation II .....	42
9. The Expression Performance of DCs with Extended Meanings.....	43
10. The Distribution of Errors .....	45
11.The Beginner's Accuracy Sequence .....	50
12.The General DC Accuracy Sequence.....	52

## LIST OF FIGURES

Figure	Page
1. The Comprehension Performance of DCs with Directional Meanings .....	36
2. The Performance of Translation I .....	37
3. The Usage Rate of DCs with Directional Meanings .....	39
4. The Comprehension Performance of DCs with Extended Meanings .....	41
5. The Performance of Translation II .....	42
6. The Usage Rate of DCs with Extended Meanings.....	44

# CHAPTER 1

## INTRODUCTION

### 1.1 Background and Previous Study Review

“Chinese Directional Complements are the directional verbs used behind other verbs or adjectives to serve as complements.” (Liu, 1998:1). The study of Chinese Directional Complements (DCs) has been of considerable interest to linguists for years. From the 1980s, the number of related studies has increased rapidly. Yang (2004a) summarized that the position of the object had always been one of the hottest fields in DCs studies. Besides, the study on extended meanings of DCs also attracted many scholars. Moreover, some scholars worked on the studies on the feature of DCs. When it comes to the syntactic studies of DCs, some studies focused on the syntactic complexity of DCs, and some of them compared the Chinese DCs with similar expressions in other languages.

However, these studies barely concerned how second-language (L2) Chinese learners acquire Chinese DCs. The previous studies on the acquisition of DCs included two major fields: one was errors analysis, and the other was acquisition sequence.

When it comes to errors analysis, Li (1999) divided American students’ errors of DCs into four types: 1) object position error, 2) verb omission, 3) DC omission and 4) DC misuse. She claimed that when a verb and a DC had more stable connection, this construction would be easier for learners. Besides, the more similarities that Chinese DC and English “Verb+ Prep.” share, the fewer errors the learners would make.

Wu (2002) analyzed Japanese students’ errors of DCs. She pointed out that their errors included several types: confusing simple DCs with compound DCs; using

inappropriate resultative complements instead of DCs; omission and addition of DCs; misordering of object; and verb errors.

Yang (2003a) studied English-speaking students' acquisition of Chinese DCs by analyzing the interlanguage corpus. He compared the different error types and causes at different proficiency levels. At the same year, he used another interlanguage corpus to analyze Korean-speaking students' acquisition of DCs. He found that their major error types included 1) overgeneralizing DCs, 2) combining the wrong DC with object, and 3) using the DC which has extended meaning as a verb (Yang, 2003b). In 2004, he continued his interlanguage corpus analysis to study Japanese-speaking students' acquisition of Chinese DCs, and pointed out that overgeneralization was the main problem and it was affected by either intralingual transfer or interlingual transfer (Yang, 2004b).

Chen and Li (2007) studied Thai students' acquisition of DCs. They claimed that the extended meanings of DCs, the lack of semantic counterparts and the compound DCs with object were three major difficulties, since they caused 60% of all errors.

Besides the error analysis, scholars studied the acquisition sequence of Chinese DCs to find out whether the different patterns of DCs were equally difficult for the L2 learners.

Qian (1997) analyzed Japanese students' written samples, and also designed a questionnaire to find out their acquisition sequence of DCs. The acquisition sequence she found was:

1. Verb + Simple DCs without Object
2. Verb + Compound DCs without Object

3. Verb+ Simple DCs with Normal Object
4. Verb+ DCs with Place Object (Comprehension)
5. Verb+ Compound DCs with Normal Object
6. Verb+ DCs with Place Object (Expression)

Yang (2003a) used ten DC patterns to analyze the interlanguage corpus of English-speaking students. The acquisition sequence he found was as follows:

1. Verb+ Simple DCs (Directional Meaning)
2. Verb+ Simple DCs (Extended Meaning)
3. Verb+ Compound DCs (Directional Meaning)
4. Verb+ Simple DCs with Object (Extended Meaning)
5. Verb+ DC1+ Object+DC2 (Directional Meaning)
6. Verb+ DC1+ Object+DC2 (Extended Meaning)
7. Verb+ Compound DCs (Extended Meaning)
8. Verb+ Compound DCs + Object (Extended Meaning)
9. Verb+ Simple DCs with Object (Directional Meaning)
10. Verb+ Compound DCs +Object (Directional Meaning)

Bai (2010) adopted Yang's classification method to study Vietnamese-speaking students' acquisition of DCs, and got a different acquisition sequence of DCs :

1. Verb+ Simple DCs (Directional Meaning)
2. Verb+ Compound DCs (Directional Meaning)
- Verb+ DC1+ Object+DC2 (Directional Meaning)
- Verb+ Simple DCs with Object (Directional Meaning)

3. Verb+ Simple DCs (Extended Meaning)
4. Verb+ Simple DCs with Object (Extended Meaning)
5. Verb+ DC1+ Object+DC2 (Extended Meaning)
6. Verb+ Compound DCs +Object (Directional Meaning)
7. Verb+ Compound DCs (Extended Meaning)
8. Verb+ Compound DCs + Object (Extended Meaning)

Xiao and Zhou (2009) created a multi-dimensional way to classify DC constructions. They divided DC constructions into 14 patterns. The acquisition sequence of DCs they found was:

1. Subject + Verb + Simple DC+ Object (Directional Meaning)
2. Subject + Verb + Simple DC (Directional Meaning)
3. Subject+ Verb + Compound DC (Extended Meaning)
4. Subject + Verb + Simple DC+ Object (Extended Meaning)
5. Subject+ Verb + Compound DC (Directional Meaning)
6. Subject + Verb + Simple DC (Extended Meaning)
7. Subject+ Verb + Object+ Compound DC (Directional Meaning)
8. Subject+ Verb + Compound DC1+Object+ Compound DC2  
(Directional Meaning)
9. Subject+ Verb + Compound DC+ Object (Extended Meaning)
10. Subject + Verb+ Object + Simple DC (Directional Meaning)
11. Subject+ Verb + Compound DC1+Object+ Compound DC2  
(Extended Meaning)
12. Subject+ Verb+ Object+ Compound DC (Extended Meaning)

13. Subject+ Verb + Compound DC+ Object (Directional Meaning)

14. Subject + Verb+ Object + Simple DC (Extended Meaning)

These acquisition studies about DCs were of great help for teaching, but there were some deficiencies. First, when it comes to the data collection, there was a lack of learners' background information in some corpus studies. Second, the scholars classified DCs in different ways. Qian (1997) claimed that DCs could be divided into 6 patterns. Yang (2003) divided DCs into 10 patterns. According to Xiao and Zhou's classification, there are 14 DC patterns. Third, most acquisition sequences were arranged merely according to error rate. Actually, it is unpersuasive to identify whether students acquire certain constructions only based on error rate, because students might avoid using some difficult ones.

## **1.2 The Goal and Significance of this Thesis**

This study focused on the two fields mentioned above: the error analysis and the acquisition sequence. The goal of this study included three key points: 1) to analyze L2 learners' errors of Chinese DCs, 2) to investigate their acquisition of the directional meanings and extended meanings of DCs, and 3) to test whether there is an acquisition sequence of Chinese DCs for English-speaking learners. The analysis of these three key aspects in L2 learner's acquisition process of Chinese DCs constituted the core of this thesis, which concluded with some pedagogical implications.

The significance of this study was reflected in two ways. First, previous research on Chinese DCs acquisition sequence have mainly depended on the errors rate. Schachter (1974) pointed out that when speaking or writing an L2, the learner is often found to try to avoid using difficult words or constructions, and use some simpler words or



constructions instead. Therefore, it is possible that some difficult constructions of DCs are barely used, and fewer errors occurred as a result. To deal with this deficiency of prior research, the study compared the usage rate of different DC constructions between Chinese native speakers and the L2 learners, and found out whether the L2 learners tried to avoid certain constructions. Second, this study used Xiao and Zhou's multidimensional ways to classify DCs, and also included Ba construction. In the participants' textbook-Integrated Chinese Level 1 Part 2 (Liu, 2008), two Ba constructions with DCs are introduced together with other DC patterns. Therefore, these Ba constructions are added as Type 15 and Type 16.

### **1.3 The Introduction of Hypotheses and Research Methods**

#### **1.3.1 Hypotheses**

For a long time, the teacher-centered model had been emphasized in the second language teaching. This point of view hadn't changed until the development of cognitive psychology reached a high level in late 1950s. People started to believe there were some inner factors which can influence the acquisition of second language. Therefore, the studies of the acquisition of second language attracted many scholars, and became a very hot topic in the field of pedagogy.

The prior studies of the acquisition of second language have produced many theories and hypotheses, this study of Chinese DCs were based on these relevant hypotheses:

#### **1. Contrastive Analysis Hypothesis**

This hypothesis states that we can predict and describe the patterns which will cause difficulty and which will not, by comparing L2 with L1 systematically. In the

second language acquisition process, the main difficulty comes from the interference of L1. Through the systematic comparison between the native language of students and the target language, the errors can be prevented.

This hypothesis is based on the behavioral psychology which believes that learning a new language is like learning new behavior. During the learning, the old behaviors will definitely impact the new behaviors.

However, some scholars hold negative attitude to this hypothesis. Chomsky pointed out that human beings are born to have language learning ability. Contrastive analysis hypothesis, which equal language learning process to the stimulus-response training of animals, overlooks the initiative of human beings. And Ellis also claimed that there is no way to compare two languages with significant differences. For example, the *ba* 把 sentence is a unique construction in Chinese which cannot be compared to any English construction. Moreover, languages differences have nothing to do with the difficulties. In fact, learners might struggle even if the differences are small. Therefore, the errors cannot be predicted.

Although this hypothesis is controversial, some general consensus have been reached. First of all, the language transfer is inevitable. It can have an important impact on second language acquisition. Second, Contrastive Analysis aims to find out that when, where and how L1 influences L2. Third, language transfer is a complicated process which is related to human being's psychology. In addition, the interference of L1 is not the only element that causes error. Moreover, language transfer is more likely to happen when the two languages have some similar characteristics. Finally, learners will use L1 to comprehend L2 in order to complete communication.

The native language of the L2 Chinese learners in this research is English. According to this hypotheses, the study strives to find out: the English's impact on the acquisition of Chinese DCs, when, where and how it influences the acquisition, and the way L2 learners use it to comprehend Chinese DCs.

## 2. The Interlanguage Hypothesis

As an independent linguistic system, the interlanguage is developed by L2 learners. When the learner has not become fully proficient yet but is approaching the target language, he/she might preserve some features of the first language, overgeneralize target language rules, and creating some special constructions.

According to the summary in *Duiwai hanyu jiaoyuxue yinlun* (Liu, 2002), there are five key characteristics of interlanguage:

- 1) Independence. Interlanguage is an independent language system, at the transition state between native language and target language.
- 2) Variability. As a transitional system, it will develop with learner's effort and the communication needs. From simple to complicated, interlanguage will gradually turn away from native language, and approach the target language.
- 3) Systematization. Interlanguage has its own special rules of pronunciation, grammar and vocabulary. L2 learners create them, and use them to build up the whole system of target language.
- 4) Fossilization.

After learners acquire certain target language constructions, the development of interlanguage will slow down. Learner stick to those acquired constructions whenever they need to use relevant expressions.

5) The combination of reorganizing and reconstructing. The interlanguage is based on the acquired language and cultural knowledge of L2 learners. It is a complicated procedure which requires reorganization and reconstruction.

This hypothesis is of great help for the study on Chinese DCs. It provides unique perspective. The errors we try to eliminate are useful. They can be used to indicate the development state of acquisition. After the systematic analysis of errors, we might be able to understand the interlanguage created by learners, and find out more effective ways to guide them to approach the target language.

### 3. The Natural Order Hypothesis

Corder proposes this hypothesis for second language acquisition firstly. He claimed that the way we acquire the rules of language is predictable. Some rules tending to be acquired earlier than others. The formal simplicity could not determine the acquire order solely.

Under the influence of this hypothesis, a series of studies by Dulay and Burt investigated the staged development and systematicity on English morpheme. These findings seemed to prove Corder's assumption, the learners of the same L2, from differing L1 backgrounds, and learning under different conditions of exposure developed accuracy on grammatical morphology in a natural order.

Finding out the natural sequence of Chinese DCs will be beneficial to our teaching in the class. According to the acquisition sequence, the teacher can revise teaching materials and technologies they use in the classroom to maximize language development of students. Moreover, the textbook authors might understand the nature of "built-in syllabus" that L2 learners follow and rearrange the presentation of Chinese DCs. The

problem of mismatching the input and intake will be solved as a result.

### **1.3.2 The Research Methods**

Error Analysis appeared in 1960s. This is the first research method which focuses on the learner's language system, and develops certain ways to describe and analyze it.

“Error” here refers to a deviation in learner language. It results from lack of knowledge of the correct rules of target language. It is different from the “mistake”.

“Mistake” is a deviation in learner language that occurs when learners fail to perform their competence.

Corder (1967) suggested five steps of error analysis: 1) collection of a sample of learner language; 2) identification of errors; 3) description of errors; 4) explanation of errors, and 5) evaluation of errors.

In this thesis, the errors analysis of L2 Chinese language learners on DCs followed these steps. The research data included writing samples and questionnaire survey. The writing samples were used as the natural materials. They came from the compositions of L2 learners at intermediate and advanced levels at a New England university. The questionnaire survey provided elicited samples. The participants of questionnaire survey included the novice, intermediate, and advanced levels' Chinese learners and the native Chinese speakers who studied at the same university.

## CHAPTER 2

### THE COMPLEXITY OF CHINESE DIRECTIONAL COMPLEMENTS

#### 2.1 Classification of Chinese DCs

Liu (1998) claimed there is a total of 28 Chinese Directional verbs. However, other scholars claimed the number of DCs is much less than 28. Type Shang verbs such as *jin* 进, *chu* 出, *shang* 上, *xia* 下, *qi* 起, *hui* 回, *guo* 过 cannot be considered as the DCs. They are the results complements.

In *Duiwai hanyu jiaoxue yufa de buyu xitong*, Lü (1999) pointed out that *lai* 来 and *qu* 去 indicate direction. They are related to the standing point. On the contrary, Type Shang verbs cannot indicate direction, and have nothing to do with the standing point. They merely indicate motion. Moreover, when it comes to the position of the object, interrogative construction and negative construction, Type Shang verbs have more commons with resultative complements rather than with other DCs. Finally, the semantic analysis shows that Type Shang verbs have correlation with results. For instance, *shang* 上 usually delivers the result meaning, such as: *kan shang ta* 看上她; *kao shang daxue* 考上大学; and *he shang shu* 合上书 etc. It only has something to do with directional meaning in the case of “*pa shang shan* 爬上山”. Therefore, Lü suggested that Type Shang verbs should be classified into the resultative complements.

In this thesis, Type Shang verbs are considered as DCs. The criteria for this classification are as follows:

- 1) *Hanyu shuiping dengji biao zhun yu yufa dengji dagang*. (1996)

This standard manual was published by the Chinese government for teaching Mandarin and designing exams in mainland China. It indicated clearly that Type Shang

directional verbs can be considered as DCs, and provided some examples:

- a. 他 跑 上 楼 了。

Ta pao shang lou le.

he run up floor le

He ran upstairs.

- b. 她 走 下 楼 了。

Ta zou xia lou le.

she walk down floor le

She went downstairs.

- c. 请 把 这 张 桌 子 搬 进 屋 里。

Qing ba zhezhang zhuozi ban jin wu li.

please ba this table move in room inside

Please move this table into the room.

- d. 你 把 这 些 书 搬 出 教 室。

Ni ba zhexie shu ban chu jiaoshi.

you ba these book move out classroom

You move these books out of the classroom.

- e. 飞 机 飞 过 大 海。

Feiji fei guo dahai.

plane fly over sea

The plane flew over the sea.

- f. 阿 里 买 回 一 本 新 书。

A-li mai hui yiben xin shu.

A-li buy back one new book

A-li bought a new book.

g. 他 笑 着 站 起来。

Ta xiao zhe zhan qilai.

he smile auxiliary stand up

He stood up with a smile.

## 2) Wang's standard

In *Quxiang wenti yanjiu* (Wang, 2005), Wang pointed out that standard of DCs is based on three key points: motion, direction, and standing point.

A directional verb is able to indicate the motion of an object. This kind of motion has certain or uncertain direction, and also involves the standing point and the moving objects. Therefore, the standard of a directional verb can be described as:

[+motion][+direction][+/-±standing point] (“+” means certain, “±” means uncertain).

Take *shang* 上 as an example to explain his statement.

a. 他 爬 上 山, 发现 我们 已经 在 那里 等 他 了。

Ta pa shang shan, faxian women yijing zai nali deng ta le.

he climb up hill find we already at there wait him le

He climbed up the hill, and found we were waiting for him there.

*Shang* 上 in this sentence indicates the motion is from a low place to a high one.

The standing point is on the top of the hill according to the context. Therefore, in this case, *shang* is a DC.

b. 你 爬 上 山 后 要 赶紧 下来, 我们 在 这里 等 你。

Ni pa shang shan hou yao ganjin xialai, women zai zheli deng ni.



you climb up hill after want hurry down we at here wait you

You get down quickly after climbing up the hill, we will wait for you here.

*Shang* 上 in this sentence indicates that the motion is from low place to the high one, but the standing point is different. It is at the foot of the hill. *Shang* 上 is definitely a DC in this case as well, since it is related to motion, direction and standing point.

The Semantic features of Type Shang verbs can be described as follows:

Table 1: The Semantic Features of Type Shang Verbs

Semantic Feature Directional Verb	Motion	Direction	Standing point
<i>Jin</i> 进	+	+	±
<i>Chu</i> 出	+	+	±
<i>Shang</i> 上	+	+	±
<i>Xia</i> 下	+	+	±
<i>Qi</i> 起	+	+	±
<i>Hui</i> 回	+	+	±
<i>Guo</i> 过	+	+	±
<i>Kai</i> 开	+	+	±
<i>Dao</i> 到	+	+	±

According to the two standards mentioned above, the Chinese DCs in this thesis include the Type Shang verbs. There are a total of 28 Chinese DCs. These 28 DCs can be divided into two categories: simple DCs (*lai* 来, *qu* 去, *shang* 上, *xia* 下, *jin* 进, *chu* 出, *hui* 回, *guo* 过, *qi* 起, *kai* 开, *dao* 到) and compound DCs (*shanglai* 上来, *shangqu* 上去, *xialai* 下来, *xiaqu* 下去, *jinlai* 进来, *jinqu* 进去, *chulai* 出来, *chuqu* 出去, *huilai* 回来, *huiqu* 回去, *guolai* 过来, *guoqu* 过去, *qilai* 起来, *kailai* 开来, *kaiqu* 开去, *dao...lai* 到...来, *dao...qu* 到...去).

## 2.2 Semantics Complexity of DCs

The semantics of DCs includes three categories: the directional meaning, the result meaning and the status meaning. All DCs contain directional meanings which indicate the motion of objects. Most of the DCs can indicate the result or achievement of motions. And some of them can show the change of status. When the DCs refer to the result, achievement and the change of status, the meanings they convey are extended meanings. (Liu, 1998: 2)

1. 小 鸟 飞 出 来 了。

Xiao Niao Fei chulai le.

little bird fly out le

The little bird flew out.

In this case, *chulai* 出来 encodes the path of the birds' motion, it means through the action "fly", the position of birds has been changed from somewhere inside to outside. This is an example of DC's directional meaning.

2. 我 找 到 他 了。

Wo zhao dao ta le.

I find to him le

I found him.

*Dao* 到 in this example tells us the search had a result- the person was found. The directional verb *dao* 到 here has nothing to do with the space or direction but the result of motion.

3. 音乐 停 下 来 了。

Yinyue ting xialai le.

music stop down le

Music stopped.

In this case, *xialai* 下来 indicates the end of an existing status, and it also has nothing to do with the direction of motion. It conveys the status meaning.

### 2.3 Syntactic Complexity of DCs

When it comes to the syntactic constructions of DCs, the scholars have various classification methods to divide the DCs into different patterns.

Qian (1997) claimed that DCs constructions can be divided into six patterns:

1. Verb + Simple DCs without Object
2. Verb + Compound DCs without Object
3. Verb+ Simple DCs with Normal Object
4. Verb+ DCs with Place Object
5. Verb+ Compound DCs with Normal Object
6. Verb+ DCs with Place Object

This classification is based on the type of DCs and the characteristics of objects. However, this classification doesn't reflect the rule of word order completely. Take type 3 as an example, "with" cannot indicate the position of the object. It can be put after the simple DC, such as:

1. 他 拿 来 一 本 书。

Ta na lai yi-ben shu.

he bring hither one book

He brings a book.

There is another word order. The object can be placed before the simple DC as

well. For example:

2. 我 给 他 送 一件 大衣 去。

Wo gei ta song yi-jian dayi qu.

I to him send one coat thither

I send him a coat.

Yang (2003) suggested another classification of DCs constructions. He classified the DCs into ten patterns, they are:

1. Verb+ Simple DCs (Directional Meaning)
2. Verb+ Simple DCs (Extended Meaning)
3. Verb+ Simple DCs with Object (Directional Meaning)
4. Verb+ Simple DCs with Object (Extended Meaning)
5. Verb+ Compound DCs (Directional Meaning)
6. Verb+ Compound DCs (Extended Meaning)
7. Verb+ DC1+ Object+DC2 (Directional Meaning)
8. Verb+ DC1+ Object+DC2 (Extended Meaning)
9. Verb+ Compound DCs +Object (Directional Meaning)
10. Verb+ Compound DCs + Object (Extended Meaning)

The highlights of Yang's classification include two points. One is taking different grammatical meanings into account. The other is considering the number of DCs in one pattern. However, like Qian did in her classification method. In type 3 and type 4, Yang used "with", which cannot reflect the word order precisely.

Xiao and Zhou (2009) created a new way to classify the syntactic constructions of DCs. This multidimensional classification depends on three key points: the type of DCs,

the number of constituents, and the meaning of DCs. The 14 patterns include:

1. Subject + Verb + Simple DC (Directional Meaning)
2. Subject + Verb + Simple DC (Extended Meaning)
3. Subject + Verb+ Object + Simple DC (Directional Meaning)
4. Subject + Verb+ Object + Simple DC (Extended Meaning)
5. Subject + Verb + Simple DC+ Object (Directional Meaning)
6. Subject + Verb + Simple DC+ Object (Extended Meaning)
7. Subject+ Verb + Compound DC (Directional Meaning)
8. Subject+ Verb + Compound DC (Extended Meaning)
9. Subject+ Verb + Object+ Compound DC (Directional Meaning)
10. Subject+ Verb+ Object+ Compound DC (Extended Meaning)
11. Subject+ Verb + Compound DC1+Object+ Compound DC2 (Directional Meaning)
12. Subject+ Verb + Compound DC1+Object+ Compound DC2 (Extended Meaning)
13. Subject+ Verb + Compound DC+ Object (Directional Meaning)
14. Subject+ Verb + Compound DC+ Object (Extended Meaning)

After the analysis of the different classification methods of DCs' constructions, we can tell that the syntactic complexity of DCs is reflected in two aspects: the number of constituents and DC type.

The first criterion for the classification of DC constructions is the number of constituents. Each DC type can be described by whether the object is present. The aspects of a motion event the speaker intends to highlight determine the existence of the object.

The DC constructions without an accompanying object always focus on the result or status. For examples:

1. 他 走 到 了。

Ta zou dao le

he walk to le

He arrived.

2. 灯 打 开 了。

Deng da kai le

light beat open le

Light is turned on.

When the speaker intends to indicate the source or destination of a self-initiated motion event, a place noun phrase is likely to be added in the DC construction, such as:

3. 他 走 去 学校。

Ta zou qu xuexiao

he walks to school

He walks to school.

Moreover, an object noun phrase tends to be expressed, when the speaker wants to describe caused motion, for example,

4. 我 拿 出 一 本 书。

Wo na chu yi-ben shu

I take out a book

I took out a book.

Besides the object, the number of DCs in one sentence also influences the pattern. When

the object is a place noun phrase, it should be put into the compound DC. And the compound DC will be separated as two different simple DCs. For instance,

5. 小明        冲        进        房间        来。

Xiaoming chong jin fangjian lai.

Xiaoming run into room come

Xiao Ming ran into the room.

The other classificatory criterion is DC type. Although using a simple or compound DC type is mostly a matter of choice, it can become a grammatical problem in some situations. For instance, to say “she walked out” in Chinese, one has to use a compound DC pattern:

6. 她        走        出去        了。

Ta zou chuqu le.

she walked out le

She walked out.

Omitting the deictic *qu* would generate a non-target-like form: \*Ta zou chu le. Wu (2010) claimed the hither (moving toward the speaker) and thither (moving away from the speaker) perspective in English is either omitted or implied in the lexical verb forms, such as *bring/take, come/go, or return/leave*. Hence, compound DCs, which encode two dimensions of a single motion event as separate lexical items, might be more challenging for L2 learners than are simple DCs.

Given the semantic complexity and syntactic complexity of Chinese DCs, the potential challenges can be expected when L2 learners use Chinese DCs. In the following chapters, L2 learners' errors of DCs were analyzed, their acquisition of directional

meanings and extended meanings of DCs were investigated, and the acquisition sequence of DCs for L2 learners were constructed. The following research questions were studied:

1. Based on the analysis of L2 learners' performance in the corpus study and the questionnaire survey, how are the learners' ability to use DCs? What type of error do they produce frequently?
2. The extended meanings of DCs has nothing to do with the direction. Are they more difficult than the directional meanings of DCs for L2 learners?
3. Are different syntactic constructions of DCs equally difficult for L2 learners? Which pattern do they acquire earlier? What could be the factors that influence the learning process?
4. Do L2 learners have the same preference as Chinese native speakers when they choose the syntactic constructions of DCs? Or do the L2 learners avoid to use certain DC constructions?



## **CHAPTER 3**

### **CORPUS STUDY ON THE CHINESE DIRECTIONAL COMPLEMENTS**

#### **3.1 Participants and Data Collection**

47 undergraduate students participated in this study. These students were from the intermediate and high levels of intensive Chinese courses at a New England university in the spring semester of 2013. The class met for six hours per week (three hours in lectures with the instructor and three hours in discussion classes with the teaching assistants). The course textbook was Integrated Chinese (Yao & Liu, 1997). The target DC constructions were systematically introduced to them before the spring semester of 2013, and continuously occurred in different places, such as reading texts, sample sentences for vocabulary, and grammar points throughout the lessons. When the L2 learners participated in this study, they had at least systematically learned the simple and compound DCs. They had also been exposed to the directional meanings and the extended meanings of the DCs.

The materials were collected from the compositions in the participants' final exams. They were asked to choose a topic to express their ideas by themselves, and use as many expressions as possible. This way allowed them to produce higher quality content without too many restrictions, so the Chinese DCs were be used in a more natural way.

#### **3.2 Data Analysis**

In the materials, 50 out of 472 sentences produced by the participants contained DCs. The usage rate of DCs reached 10%.

Table 2 presents their performance on DCs. The percentages indicates the

frequency and accuracy of each type.

Table 2: Performance on Each DCs in Compositions

Performance DCs	Total Usage	%Frequency	%Accuracy
<i>Dao</i> 到	21	42	81
<i>Kai</i> 开	9	18	100
<i>Qu</i> 去	7	14	43
<i>Qi</i> 起	6	12	100
<i>Xiaqu</i> 下去	3	6	33
<i>Qilai</i> 起来	2	4	100
<i>Guo</i> 过	1	2	100
<i>Chu</i> 出来	1	2	0

Note: Frequency = Total Usage/50\*100% Accuracy= Correct Usage/Total Usage\*100%

The top 1 DC used by the participants is *dao* 到. Further inspecting the usage of *dao* reveals that the participants focus on two semantic categories.

One is the analogy usage of its directional meaning, which is also considered as the directional meaning of *dao*. (Liu, 1998: 404) The analogy usage of *dao*'s directional meaning can express that the motion is lasting until certain time. For example:

1) 他 一直 睡 到 天亮。

Ta yizhi shui dao tianliang

He continuously sleep to dawn

He is sleeping until the dawn.

In this sentence, *dao* means the sleep status is lasting until a certain time.

Although *dao* is able to follow various verbs to describe a lasting motion, as long as the verbs can indicate continuous motions, such as *deng* 等, *shui* 睡, *zuo* 坐, *zou* 走, the participants preferred to use *deng* 等 with *dao* in their compositions. There were 8 sentences related to the analogy usage of *dao*'s directional meaning. 7 out of 8 were *deng dao* 等到. For example:

2) 等 到 我的 中文 水平 跟 老师 一样 好

Deng dao wode zhongwen shuiping gen laoshi yiyang hao

Wait until my Chinese level with teacher same good

Until my Chinese competence is as good as teacher

3) 等 到 孩子 能 独立 了

Deng dao haizi neng duli le

wait until child can independent le

Until child can be independent

Besides, the analogy usage of *dao*'s directional meaning can indicate the degree of changing/development status as well. For example,

4) 官司 输 到 底 了。

Guansi shu dao di le

lawsuit lose to end le

The lawsuit is lost completely.

In this case, *dao* expresses that the degree of the failure is complete.

Only 1 sentence of *dao* expressed the degree of changing/development:

5) 对 太阳能 的 利用 也 发展 到 了 很 高 的 水平

Dui taiyangneng de liyong ye fazhan dao le hen gao de shuiping

to solar of use also develop to le very high of level

The use of solar energy is also developed to a high level.

The other semantic category of *dao* in the materials was *dao* of result meaning.

Here are some examples:

6) 他 需要 找到 毕业 以后 的 工作。

Ta xuyao zhaodao biye yihou de gongzuo

he need find graduation after of work

He needs to find the job after graduation.

7) 你 会 遇到 伤心 或 开心 的 事

Ni hui yudao shangxin huo kaixin de shi

you can meet sad or happy of thing

You will encounter unhappy or happy things.

8) 我 觉得 孩子 应该 受到 良好的 教育。

Wo jude haizi yinggai shoudao lianghaode jiaoyu.

I think children should receive good education

I think children should receive good education.

In these cases, *dao* followed the verb to indicate that the action got a result, or the goal had been reached.

The errors of *dao* in the materials mainly happened when the learner used it to express result meaning. Here are some examples:

9) \* 她 没 想到 毕业 以后 不 找到 工作。

Ta mei xiangdao biye yihou bu zhaodao gongzuo

she not think graduation after not find work

She didn't expect that she can't find a job after graduation.

In this case, the word order was incorrect. The adverb “bu 不” should be put between the verb and *dao*.

10) \*所以 我 觉得 孩子 应该 收到 良好的 教育。

Suoyi wo juede haizi yinggai shoudao lianghaode jiaoyu.

so I think children should receive good education

So I think children should receive good education.

In (10), the word order and the choice of DC were both right. The error was the misusing of incorrect verbs. The verb-shou (first tone)-combined with *dao* is incorrect.

11) \*钱 能 解决 到 的 问题 就 不是 问题。

qian neng jiejie dao de wenti jiu bushi wenti.

money can solve to of problem just not problem

The problem which can be solved by money is not a problem.

In (11), in the verb *jiejue* 解决, the character “jue 决” had already conveyed a result meaning. It indicated the problem was solved. Therefore, *dao* was not necessary to occur after *jiejue* in this case. The participant might over-generalize the result meaning of *dao*, and overlook the feature of the verb used prior to *dao*.

*Qu* was the top 3 DCs used in the compositions. But its accuracy was low. The main error was about the order. Here are some examples:

12)\*我 无法 在 留 在 美国 和 回 去 北京 之间 做 选择。

Wo wufa zai liu zai Meiguo he hui qu Beijing zhijian zuo xuanze.

I unable at stay at USA and back to Beijin between make choice

I cannot choose between staying at America and going back to Beijing.

13)\*虽然 我 好 想 回 去 北京

Suiran wo hao xiang hui qu Beijing,

Although I really want go back Beijing

Although I really want to go back to Beijing,

When the object is a place NP, the object should be put between the verb and the DC. This rule was ignored in (12) and (13).

According to the data, the compound DC *xiaqu* 下去 was another difficulty.

*Xiaqu* has two status meanings. One indicates that the motion starts to get into a new phase. It is related to changing. (Liu, 1998: 195) For example,

14) Tade shengyin di le xiaqu.

her voice low le down

她的声音低了下去。

Her voice was low down.

The other status meaning of *xiaqu* implies the ongoing motion or current status is lasting. Here is an example:

15) 谈话 进行 不 下去 了。

Tanhua jinxing bu xiaqu le.

conversation go on not down le

The conversation cannot carry on.

The 3 sentences with *xiaqu* were all about the second status meaning. But 2 sentences contained errors.

16) \*如果 人们 和 公司 继续 砍 树 下去

Ruguo renmen he gongsi jixu kan shu xiaqu,

If people and company continue hew forest down

If people and companies keep hewing the forest,

17) \*如果 她 继续 没 道理 下去。

Ruguo ta jixu mei daoli xiaqu,

If she continue not reason on

If she keep being unreasonable,

In (16), *xiaqu* was redundant. “继续” can combine with *xiaqu*, but the verb used between “继续” and “下去” cannot be a VO verb. So it should be changed to “继续砍下去” or just “继续砍树”.

In case (17), “*mei dao li* 没道理” was inappropriate. Because *xiaqu* can be combined with some adjectives which contain negative meanings, such as, *an xiaqu* 暗下去 “dim”. But it is unable to be used with a negative construction.

The last error is related to *chulai*. When *chulai* is used before the object, certain numeral and measure word should be added before the object. For example,

18) 我 拿 出来 一本 书。

Wo na chulai yiben shu.

I take out a book

I take out a book.

But the numeral and measure word was missing in the DC sentence produced by the L2 learner:

19) \*我们 需要 想 出来 做法 来 减少 污染。

Women xuyao xiang chulai zuofa lai jianshao wuran.

We need think out way to reduce pollution

We should figure out approaches to reduce pollution

According to Xiao and Zhou's classification method, the usage rates of each pattern are presented in Table 3:

Table 3: Performance on DC Syntactic Patterns in Compositions

Performance DC's Pattern	Total Usage	% Frequency	Correct Usage	% Accuracy
Type 6	18	36	14	78
Type 5	13	26	10	77
Type 2	11	22	11	100
Type 8	4	8	3	75
Type 3	2	4	2	100
Type 10	1	2	0	0
Type 14	1	2	0	0

Note: Frequency = Total Usage/50\*100%

Accuracy= Correct usage/Total Usage\*100%

There were only seven DC patterns produced by the L2 learners. The distribution of the DC patterns was uneven. The top 3 frequently used patterns-type6, type5 and type2 accounted for 84%.

Type 6 is "Subject + Verb + Simple DC+ Object (Extended Meaning)". Type 5 is "Subject + Verb + Simple DC+ Object (Directional Meaning)". The DCs in these two types were used right after the verbs. L2 learners might prefer to treat "Verb+ DC" as an entirety or as a verb.

Type 2 is "Subject + Verb + Simple DC (Extended Meaning)". Type 8 is "Subject+ Verb + Compound DC (Extended Meaning)". There were no objects in these



two types, so the position of the object did not bother L2 learners. It might be the reason these two types were used frequently as well.

### 3.3 Discussion

The result of corpus study shows that the usage rate of simple DCs is much higher than the compound ones. The ratio of simple DC to Compound DC is approximate 7:1. Moreover, most of the DCs conveys extended meanings rather than the directional meanings. The ratio of extended meaning to directional meaning is near 2:1. Although the extended meanings of DCs have nothing to do with the direction. They are not as difficult as the directional meanings of DCs for L2 learners. Finally, the top3 choices of DCs reflects that different syntactic constructions of DCs might not equally difficult for L2 learners. L2 learners prefers to use DC right after verb.

Li (1999) pointed out that in some high-frequency DC constructions, such as, *shengxia* 剩下, *liuxia* 留下, *yinqi* 引起, the verbs are very close to DCs. Therefore, they were likely to be treated as an entirety by L2 learners. She claimed that a DC construction might be treated as a word by native speaker as well. According to *Xiandai hanyu cidian*, the definition of *yinqi* is “One thing, situation or activity that make another thing, situation and activity occurs”.

Hong (2006) noticed that “Subject + Verb + Simple DC+ Objects” is much more popular than “Subject + Verb + Object+ Simple DC”. 91.7% sentences with simple DCs she collected from the corpus are the former type. Therefore, she came to a conclusion that L2 learners were prone to consider “verb + Simple DC” as an entirety or as a verb.

Considering the “verb +DC” as an entirety seems more convenient to L2 learners. In the study, the top1 used DC is *dao*. There are many examples in the natural materials,

such as *zhao*dao 找到 “find”, *shou*dao 收到 “receive”, *yue*dao 遇到 “meet”, and *fazhan*dao 发展到 “reach”. In these cases, “verb + *dao*” can be translated to one English verb. Meanwhile, the meanings they convey are stable and won’t change in different context. Therefore, *dao* became a very popular DC.

However, treating “verb + DC” as an entirety could lead to errors. For example, when the object is a place noun phrase, it should be put between verb and DC. But L2 learners who considered *huiqu* 回去 as an entirety made the error, like:

- 13) \*虽然 我 好 想 回 去 北京,  
Suiran wo hao xiang hui qu Beijing,  
Although I really want go back Beijing  
Although I really want to go back to Beijing,

In fact, “when L2 learners treat DCs as an entirety, the DCs no longer reflect the features of complement. The acquisition of these constructions cannot show their acquisition of Chinese DCs” (Li, 1999)

Due to the concern that mentioned above, the limited amount of the materials, and the possibility that some DC constructions might be avoided by L2 learners on purpose, and it is possible that the acquisition of Chinese DCs was not completely displayed in this corpus study. Therefore, a questionnaire was designed to further test L2 learner’s knowledge on Chinese DCs.

## **CHAPTER 4**

### **A SURVEY ON THE CHINESE DIRECTIONAL COMPLEMENTS**

#### **4.1 Participant and Data Collection**

82 undergraduate students and 15 Chinese native speakers participated in this study. The undergraduate students were L2 learners who enrolled at the beginner, intermediate and high level of intensive Chinese courses at a New England university in the spring semester of 2013. They consisted of 47 beginners, 23 intermediates, and 12 advances. The class met for six hours per week (three hours in lectures with the instructor and three hours in discussion classes with the teaching assistants). The course textbook was Integrated Chinese (Yao & Liu, 2008). Those 15 native Chinese speakers also came from the same university.

The instruments (see Appendix A&B) were three-section questionnaires. They were pilot-tested by 5 Chinese native speakers and 5 L2 learners at the same university. None of the participants in the pilot test retook the survey when data were collected. These two instruments were modified based on the pilot test, which resulted in their present form.

The first section was made up of questions about participants' demographic information. The instruments also included questions on participants' Chinese learning experiences. The only differences between the two instruments was that the Chinese native speaks' instrument contained some questions about their English learning experiences and dialect ability.

The second section consisted of 16 multiple choices. It focused on the comprehension ability of DCs. They were 14 DC construction patterns arranged

according to the multidimensional classification method created by Xiao and Zhou (2009) and 2 Ba constructions.

Type 15. Subject+Ba+Object+Verb+ Lai/Qu

Type 16. Subject+Ba+Object+Verb+ Shang/Xia... (+Place word) + Lai/Qu

The third section was a translation task which contains 16 English sentences. It focused on the expression ability of DCs. The participants were required to use DCs to translate the English sentences into Chinese.

The target DC constructions were systematically introduced to the intermediate and the advanced before the test, but the participants at beginner level hadn't learned the extended meanings of DCs. They were required to answer the questions related to the directional meaning of DCs, including 1, 3, 5, 7, 9, 11, 13, 15 and 16.

The questionnaires were administered by instructors during a regular class session in the spring semester. Students were informed that a survey would be conducted. The study was anonymous and confidential. Their participation was optional. Answering the survey took approximately 15 minutes. Then instructors collected the questionnaires and returned them to the researcher. Among 82 questionnaires distributed, the data from 81 questionnaires were used. One is invalid, because the second section of that questionnaire was left blank.

## **4.2 Results**

### **4.2.1 The Performance of Chinese DCs**

#### **1. DCs with Directional Meanings**

In the second section, there were 9 multiple choices related to the DCs with directional meanings. They are Q1, Q3, Q5, Q7, Q9, Q11, Q13, Q15 and Q16:

Q1-Type 1. Subject + Verb + Simple DC (Directional Meaning)

Q3-Type 3. Subject + Verb+ Object + Simple DC (Directional Meaning)

Q5-Type 5. Subject + Verb + Simple DC+ Object (Directional Meaning)

Q7-Type 7. Subject+ Verb + Compound DC (Directional Meaning)

Q9-Type 9. Subject+ Verb + Object+ Compound DC (Directional Meaning)

Q11-Type 11. Subject+ Verb + Compound DC1+Object+ Compound DC2

(Directional Meaning)

Q13-Type 13. Subject+ Verb + Compound DC+ Object (Directional Meaning)

Q15- Type 15.Subject+Ba+Object+Verb+ Lai/Qu

Q16-Type 16.Subject+Ba+Object+Verb+ Shang/Xia... (+Place word) + Lai/Qu

Table 4 presents the accuracy of these questions, and Figure 1 presents the same data visualized as a line graph.

Four general patterns were observed: 1) the comprehension performance of two Ba constructions was high in all L2 groups; 2) three L2 groups shared the same weakness in Type 13; 3) both the beginner and the intermediate had bad performance in Type 3; and 4) L2 learners' comprehension ability of DCs was much lower than the Chinese native speakers.

A one-way ANOVA was used to determine the effect of proficiency levels on the comprehension accuracy of each DC type with directional meaning. The result shows that proficiency levels did have a significant effect on the accuracy of each DC type with directional meaning:  $F(3, 32) = 11.141, p < .05$ .

There was an abnormal data in Chinese native speakers group. The accuracy of Q1 was much lower than other questions. Q1 was the first question on DCs in the survey,

it is possible that the native speaker did not read the question carefully at the beginning of the survey. Therefore, they made mistakes. To avoid this situation in the future studies, the researcher could add some irrelevant questions at the beginning of the survey to the warm up the participants.

Table 4: The Comprehension Performance of DCs with Directional Meanings

Performance Question	%Accuracy			
	Beginner	Intermediate	Advanced	Native
1	51	64	67	60
3	40	50	75	93
5	62	73	58	100
7	68	55	92	100
9	60	55	100	100
11	74	68	83	100
13	36	55	67	100
15	77	77	75	93
16	87	73	83	100

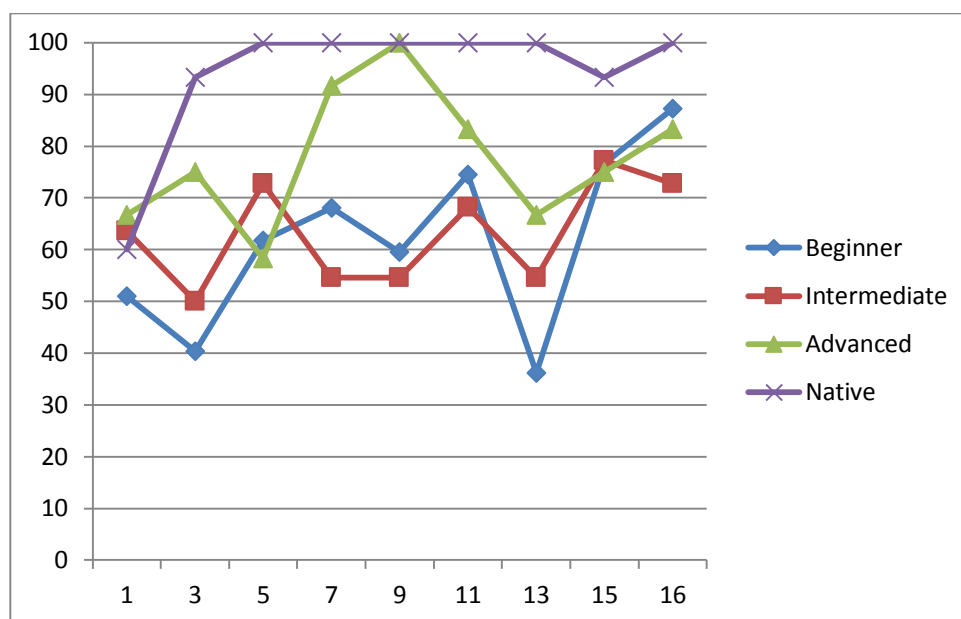


Figure 1: The Comprehension Performance of DCs with Directional Meanings

In the third section, the participants used the vocabularies and grammars they learned for translation. There were 9 sentences related to the DCs with directional meanings. Table 5 presents the accuracy of the 9 questions and Figure 2 presents the same data visualized as a line graph.

Table 5: The Performance of Translation I

Performance Question	%Accuracy			
	Beginner	Intermediate	Advanced	Native Chinese
1	74	73	92	100
3	45	32	42	100
5	34	41	58	93
7	19	18	33	80
9	17	23	25	93
11	43	36	50	93
13	19	50	58	67
15	15	9	58	87
16	23	50	42	100

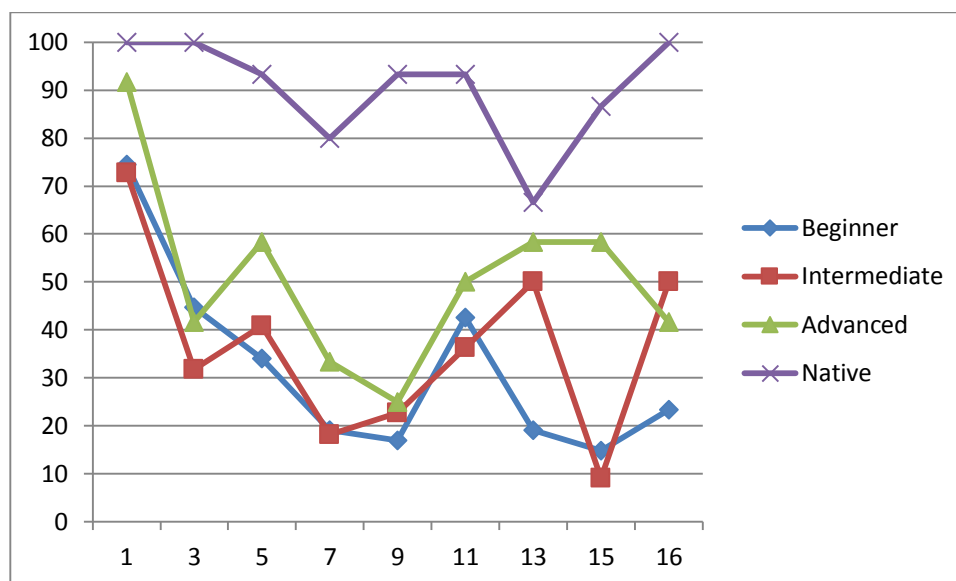


Figure 2: The Performance of Translation I

The trends in the Figure 2 shows the performance of translation. However, it cannot displays participants' performance of DCs clearly. Although all these English sentences can be translated by using certain Chinese DCs patterns, the participants did not use DCs in some cases.

The performance of DCs with directional meanings is presented in Table 6:



Table 6: The Expression Performance of DCs with Directional Meanings

Performance Pattern	Total Usage				Usage Rate				Correct Usage				% Accuracy			
	B	I	A	N	B	I	A	N	B	I	A	N	B	I	A	N
Type 1	40	16	12	14	9	8	11	10	34	11	12	14	85	69	100	100
Type 3	19	17	7	0	4	9	6	0	10	3	1	0	53	18	14	0
Type 5	66	24	18	39	16	12	17	29	21	16	13	37	32	67	72	95
Type 7	9	5	0	1	2	3	0	1	5	1	0	0	56	20	0	0
Type 9	13	9	0	4	3	5	0	3	6	6	0	3	46	67	0	75
Type 11	9	17	6	6	2	9	6	4	2	0	0	5	22	0	0	83
Type 13	5	7	5	8	1	4	5	6	3	2	3	2	60	29	60	25
Type 15	14	8	3	10	3	4	3	7	4	3	3	8	29	38	100	80
Type 16	17	29	10	16	4	15	9	12	7	15	5	16	41	52	50	100

Note: B means Beginner, I means Intermediate, A means Advanced, N means Native

%Usage Rate= (The Total Usage of Each Type/ The Amount of All Sentences)\*100%

%Accuracy = (Correct Usage of Each Type/ The Amount of Each Type)\*100%

A one-way ANOVA was used to determine the effect of proficiency levels on the usage rate of each DC type with directional meaning. The result shows that proficiency levels did not have a significant effect on the usage rate of each DC type with directional meaning:  $F(3, 32) = 0.496$ ,  $p > .05$ . Therefore, the L2 learner's usage rate of each DC patterns with directional meaning has the similar tendency like the Chinese native speaker. Besides, another one-way ANOVA test was used to determine the proficiency levels on the expression accuracy of each DC type with directional meaning. The result shows that proficiency levels did have a significant effect on the expression accuracy of each DC type with directional meaning:  $F(3, 32) = 0.737$ ,  $p > .05$ . It is possible that the small number of some DC patterns limited the study from making result more statistically significant.

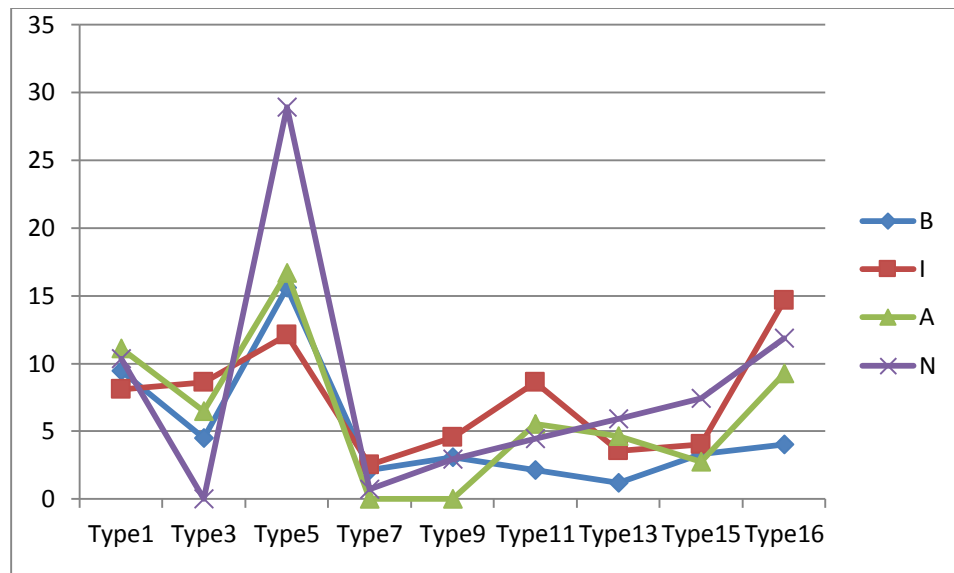


Figure 3: The Usage Rate of DCs with Directional Meanings

Figure 3 presents the same data visualized as a line graph. It shows that certain DC patterns were used more frequently than others. For example, Type 5 was one of the most frequently used DC patterns in all groups. Moreover, some DC patterns were avoided by the participants. For instance, the advanced did not use Type 7 and Type 9, and the native speakers did not use Type 3.

Type 7 is “Subject+ Verb + Compound DC (Directional Meaning)”. Type 9 is “Subject+ Verb + Object+ Compound DC (Directional Meaning)”. The learners at advanced level did not use these two types, because they preferred other DC construction patterns. For instance, “The girl went over there.” can be translated into “那个女孩走过去了。” But the advance learners translated it into “那个女孩过去了”. Another example, “You go and get him over here.” can be translated into “你去叫他过来”, but the advanced learners preferred “你去叫他来”.

Type 3 is “Subject + Verb+ Object + Simple DC (Directional Meaning)”. In this

type, some verbs can encode the paths of the motions as well. For example: The native speaker preferred to translate “She wants to go back to China.” into “她想回中国”. The simple DC “*qu* 去” was omitted, because the verb “*hui* 回” clearly indicated that the motion was a returning to an original place. The native speakers had better understanding of the semantic of the verb. Therefore, they chose a concise way.

## 2. DCs with Extended Meanings

In the second section, there were 7 sentences related to the DCs with extended meanings. They are Q2, Q4, Q6, Q8, Q9, Q10, Q12, and Q14:

Q2-Type 2. Subject + Verb + Simple DC (Extended Meaning)

Q4-Type 4. Subject + Verb+ Object + Simple DC (Extended Meaning)

Q6-Type 6. Subject + Verb + Simple DC+ Object (Extended Meaning)

Q8-Type 8. Subject+ Verb + Compound DC (Extended Meaning)

Q10-Type 10. Subject+ Verb + Object+ Compound DC (Extended Meaning)

Q12-Type 12. Subject+ Verb + Compound DC1+Object+ Compound DC2

(Extended Meaning)

Q14-Type 14. Subject+ Verb + Compound DC+ Object (Extended Meaning)

Table 7 reveals the accuracy of each question and Figure 4 presents the same data visualized as a line graph.

Table 7: The Comprehension Performance of DCs with Extended Meanings

Question \ Performance	% Accuracy		
	Intermediate	Advanced	Native
2	18	42	100
4	50	58	100
6	73	83	100
8	23	25	93
10	18	42	100
12	27	33	100
14	86	67	100

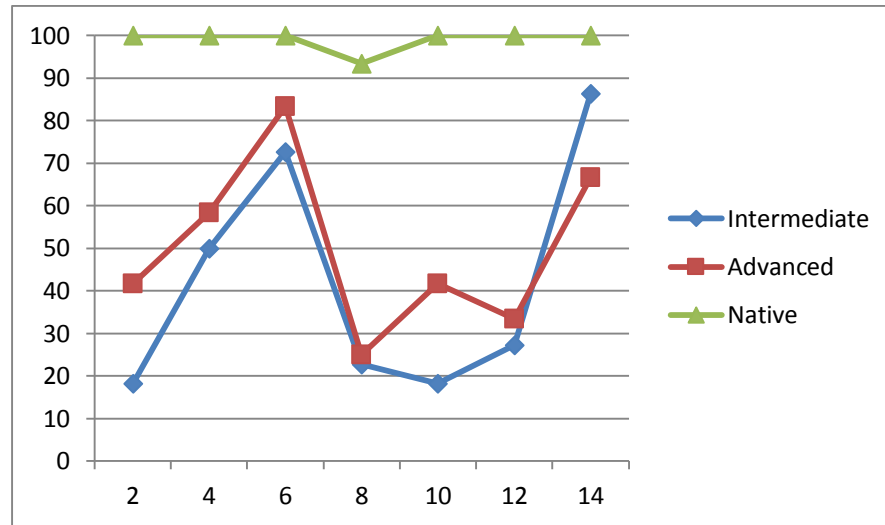


Figure 4: The Comprehension Performance of DCs with Extended Meanings

From Figure 4, we can tell that trends of the intermediate and the advanced were quite similar. They both did well on Type 6 and Type 14, and they shared the same weakness on Type 2, Type 8 and Type 12. And the L2 learners' performance of DCs was not as good as the native speakers in all cases.

A one-way ANOVA was used to determine the effect of proficiency levels on the comprehension accuracy of each DC type with extended meaning. The result shows that

proficiency levels did have a significant effect on the accuracy of each DC type with extended meaning:  $F(2, 18) = 16.56, p < .05$

In the third section, there were 7 sentences related to the DCs with extended meanings. Table 8 presents the accuracy of each question and Figure 5 presents the same data visualized as a line graph.

Table 8: The Performance of Translation II

Performance Question	%Accuracy		
	Intermediate	Advanced	Native Chinese
2	18	50	100
4	36	33	93
6	18	50	100
8	59	67	87
10	14	25	93
12	50	58	100
14	27	58	93

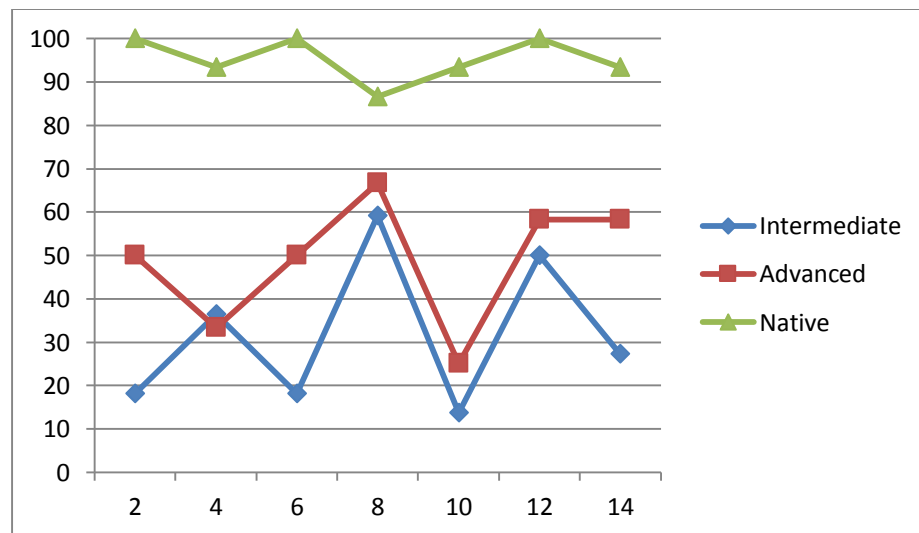


Figure 5: The Performance of Translation II

Like the translation I , the participants had their preferences for DCs. Not all the correct responses contained Chinese DCs with extended meanings. The usage of Chinese DC with extended meanings is presented below in Table 9, and Figure 6 displays the same data visualized as a line graph.

Table 9: The Expression Performance of DCs with Extended Meanings

Performance Pattern	Total Usage			Usage Rate			Correct Usage			% Accuracy		
	I	A	N	I	A	N	I	A	N	I	A	N
Type 2	1	1	8	1	1	8	1	1	8	100	100	100
Type 4	0	0	1	0	0	1	0	0	0	0	0	0
Type6	11	12	26	7	11	25	5	11	26	45	92	100
Type 8	22	14	2	14	13	2	12	6	0	55	43	0
Type 10	1	4	1	1	4	1	0	0	0	0	0	0
Type 12	4	0	1	3	0	1	4	0	1	100	0	100
Type 14	12	4	2	8	4	2	6	2	1	50	50	50

Note: I means Intermediate, A means Advanced, N means Native

%Usage Rate= (The Total Usage of Each Type/ The Amount of All Sentences)\*100%

%Accuracy = (Correct Usage of Each Type/ The Amount of Each Type)\*100%

A one-way ANOVA was used to determine the effect of proficiency levels on the usage rate of each DC type with extended meaning. The result shows that proficiency levels did not have a significant effect on the usage rate of each DC type with extended meaning:  $F(2, 18) = 0.046$ ,  $p > .05$ . Therefore, the L2 learner's usage rate of each DC patterns with extended meaning has the similar tendency like the Chinese native speaker.

Another one-way ANOVA was used to determine the effect of proficiency levels on the expression accuracy of each DC type with extended meaning. The result shows that proficiency levels did not have a significant effect on the usage rate of each DC type

with extended meaning:  $F(2, 18) = 0.1, p > .05$ . It is possible that the small number of some DC patterns limited the study from making result more statistically significant.

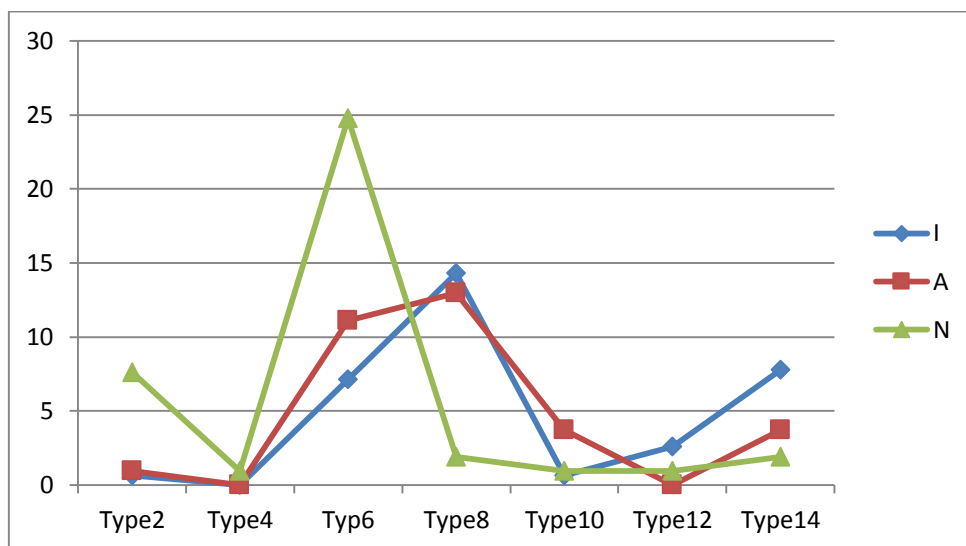


Figure 6: The Usage Rate of DCs with Extended Meanings

As shown in Figure 6, Type 6 was the top 1 choice of the native speakers. This type was also frequently used by the intermediate and the advanced. Type 2, Type 4, Type 10 and Type 12 were barely used by all groups.

Type 8 is “Subject+ Verb + Compound DC (Extended Meaning)”. L2 learners preferred to use this type, but the native speaker barely used it. This situation might result from the presentation of DCs in L2 participants’ textbooks. The compound DC-“*qilai* 起来” is repeatedly introduced as the sign which indicates the beginning of an action. Therefore, the L2 learners liked to use this familiar expression. They translated “They started to sing.” into “他们唱起来”, while the native speaker translated this sentence into “他们开始唱歌”.

#### 4.2.2 Error Analysis

3 groups of L2 learners produced 471 sentences with Chinese DCs in the

translation section. Among these sentences, 237 sentences have errors. The error rate is up to 50%. Based on error classification method of Lu (1994), the errors can be divided into four categories: omission, misuse, misordering and addition. Table 10 shows the distribution of these four error categories.

Table 10: The Distribution of Errors

Categories Statistics	Omission	Misuse	Misordering	Addition	Total
Error Number	100	62	68	7	471
Percentage	42%	26%	29%	3%	100%

(1) Omission

Omission error refers to the error that caused by the omission of one or more than one constituents in the sentence (Lu, 1994). Here are some common omission errors.

Q1: \*小明 快 进。

Xiao Ming kuai jin

Xiao Ming hurry in

Xiao Ming, come in.

This is an example how the omission of Chinese DC influences the expression of motion. According to the English sentence, we can tell that the speaker must be inside the room. But in the Chinese translation, the omission of Chinese DC-*lai* 来 cause the uncertainty of the speaker's standing point.

Q5: \*小明 走 第一个 路口。

Xiao Ming, zou diyige lukou

Xiao Ming walk first intersection



Xiao Ming walked across the first intersection.

In this example, *zou* 走 expressed the motion, but did not express the path of the motion without the Chinese DC-*guo* 过.

Q13: \*我 出来 一个 大衣。

Wo chulai yige dayi.

I out a coat

I took out a coat.

In this case, the verb was missing, and Chinese DC-*chulai* 出来 was used as a verb. This kind of error had something to do with the characteristic of Chinese DCs. “Chinese DCs are the directional verbs which used behind other verbs or adjectives to server as complements.” (Liu, 1998) It is possible that L2 learner confused the directional verb with the DC construction, and used the directional verb as the main verb in the sentence.

## (2) Misuse

Misuse error is caused by selecting the inappropriate constituent from two or several similar ones (Lu, 1994). In some cases, we found that L2 learners were able to use the appropriate syntactic constructions, but the DCs they picked were incorrect. For instance,

Q14: \*她 刚 想 出来 一件 事。

Ta gang xiang chulai yijian shi

She just think out a thing

She just recalled a thing.

The syntactic construction was totally correct. However, L2 learner selected the

wrong DC. *Xiang qilai* 想起来 means to recall something that has been forgotten. *Xiang chulai* 想出来 means to come up with a new way, method, and name.

Q16: (1)\*我 把 笔 捡 上来。

Wo ba bi jian shanglai

I ba pen pick up

I picked up the pen.

(2)\*我 把 笔 拿 起。

Wo ba bi na qi

I ba pen pick up

I picked up the pen.

“Up” can be subdivided into *shanglai* 上来 and *qilai* 起来. The compound DC *shanglai* 上来 highlights the destination of the moving figure, whereas *qilai* 起来 merely indicates the moving is from low place to high place, there is no destination of the moving figure or the destination cannot be located. (Liu, 1998). In this case, the destination of the moving figure was uncertain. Therefore, the more appropriate DC should be *qilai* 起来.

Besides, L2 learners had a problem to tell the difference between simple DC *qi* 起 and compound DC *qilai* 起来. In a declarative sentence, the simple DC *qi* 起 is always followed by the object. So the appropriate translation with *qi* 起 is “我捡起笔”.

### (3) Misordering

Misordering error refers to the wrong order of one or more than one constituents in the sentence (Lu, 1994). The top 1 misordering error produced by L2 learners was:

Q3: \* 她 想 回 去 中国。

Ta xiang hui qu Zhongguo.

She want back to China

She wants to go back to China.

When a verb combine with *lai/qu* (来/去), the position of the object depends on the feature of the object. When the object is a place word or phrase, it goes between the verb and 来/去; if the object is not a place noun or phrase, it can be placed after or before 来/去.

In this example, “Zhongguo 中国” is a place word, it should be placed between the verb *hui* 回 and the simple DC *qu* 去. However, most L2 learners put it after *qu*. This error is common among all L2 learners.

#### (4) Addition

When the grammar construction change under certain conditions, the former constituent in this construction might not fit any more. If L2 learners don't notice the change, and keep using the constituent, it would lead to an addition error. (Lu, 1994)

The addition errors are seldom found in the data. Here is an example:

Q4: \*我 很 生 他 气 起来。

Wo hen sheng ta qi qilai

I very grow him angry up

I am so angry at him.

In this case, the L2 learner tried to express the beginning of being angry. *Qilai* 起来 can indicate the beginning of an action. However, the adjectives which combine with

*qilai* should be positive, such as *liang qilai* 亮起来, *da qilai* 大起来, and *kuai qilai* 快起来. 生气 is a negative adjective in this case, it cannot combine with *qilai*.

### 4.3 Discussion

Many previous studies mentioned that accuracy was one of the most important items to exam whether L2 learners acquire the DC patterns (Qian, 1997; Yang, 2003; Xiao and Zhou, 2009; Bai, 2010; and Shu-Ling Wu, 2011). Therefore, this survey on Chinese DCs analyzed comprehension accuracy and expression accuracy in order to investigate whether there is an acquisition sequence of Chinese DCs for L2. These two kinds of accuracy were weighted equally for the construction of acquisition sequence.

Since the beginner group hadn't learned the extended meanings of Chinese DCs. Their acquisition sequence of Chinese DCs with directional meanings was constructed separately from the other two groups. The general acquisition sequence of Chinese DCs was based on the data which came from the intermediate and the advanced groups.

#### 4.3.1 The Beginner's Acquisition Sequence of DCs with Directional Meanings

Table 11 was generated from observed patterns of DCs used by the beginners in this survey. It was observed that different types of DCs presented a different degree of difficulty.

Table 11: The Beginner's Accuracy Sequence

Performance DC Type	Comprehension %	Expression %	Average %
1	51	85	68
16	87	41	64
7	68	56	62
15	77	29	53
9	60	46	53
11	74	22	48
13	36	60	48
5	62	32	47
3	40	53	47

Note: Average=Comprehension\*50%+Expression\*50%

As show in Table 11, the beginners' acquisition sequence of Chinese DCs with directional meanings is:

Type 1. Subject + Verb + Simple DC (Directional Meaning)

Type 16. Subject+Ba+Object+Verb+ Shang/Xia... (+Place word) + Lai/Qu

Type 7. Subject+ Verb + Compound DC (Directional Meaning)

Type 15. Subject+Ba+Object+Verb+ Lai/Qu

Type 9. Subject+ Verb + Object+ Compound DC (Directional Meaning)

Type 11. Subject+ Verb + Compound DC1+Object+ Compound DC2 (Directional Meaning)

Type 13. Subject+ Verb + Compound DC+ Object (Directional Meaning)

Type 5. Subject + Verb + Simple DC+ Object (Directional Meaning)

Type 3. Subject + Verb+ Object + Simple DC (Directional Meaning)

In most cases, the beginners' comprehension performance was better than their expression performance. But the beginners' comprehension performance of type 1 was

much worse than their expression performance of type 1. The comprehension question of type 1 was the first question on DCs in the survey. It is possible that L2 learners did not read the question carefully at the beginning of the survey. Therefore, they made mistakes. To avoid this situation in the future studies, the researcher could add some irrelevant questions at the beginning of the survey to warm up the participants. Besides, the beginners' comprehension performance of type 13 was worse than their expression performance. In the comprehension question of type 13, the standing point and the direction of action are implied in the first clause-“这里少了”, the L2 learners who did not get this information from the context were unable to choose the correct answer.

Moreover, this sequence suggests that the position of the object significantly influenced the acquisition of Chinese DCs with directional meanings for the beginners. The beginners first developed competence in producing simple DCs pattern without the object (type1). The next stage is the Ba construction with compound DCs (type16). The object's position in ba construction is very stable. It goes right after ba. The third stage, the DC patterns that learners acquired was compound DCs without the object (type7).

Adding the object into a DC pattern implies the increasing syntactic complexity of the word order. For example, denoting “She wants to go back to China” would require additional attention to the source “China” than simply denoting “She wants to go back.” The word orders associated with DCs vary according to the type of the inserted objects. When the objects are place nouns or phrases, the available positions for them are much more restricted, so those DCs with objects are much difficult for L2 learners. No object or the position of the objects are more stable might be the reason why type 1, 16, 7, 15 were acquired earlier than other DC patterns.

### 4.3.2 The General Acquisition Sequence of Chinese DCs

Table 12 is generated from observed patterns of DCs as used from the intermediate and advance groups in this survey.

Table 12: The General DC Accuracy Sequence

Performance DC Type	Comprehension %	Expression %	Average %
1	65	82	73
6	76	70	73
9	71	67	69
5	68	69	68
15	76	55	66
12	29	100	65
14	79	50	65
16	76	51	64
2	26	100	63
13	59	42	50
7	68	20	44
3	59	29	44
8	24	56	40
11	74	0	37
4	53	0	26
10	26	0	13

Note: Average=Comprehension\*50%+Expression\*50%

As show in Table 12, the general acquisition sequence of Chinese DCs is:

Type 1. Subject + Verb + Simple DC (Directional Meaning)

Type 6. Subject + Verb + Simple DC+ Object (Extended Meaning)

Type 9. Subject+ Verb + Object+ Compound DC (Directional Meaning)

Type 5. Subject + Verb + Simple DC+ Object (Directional Meaning)

Type 15. Subject+Ba+Object+Verb+ Lai/Qu

Type 12. Subject+ Verb + Compound DC1+Object+ Compound DC2 (Extended Meaning)

Type 14. Subject+ Verb + Compound DC+ Object (Extended Meaning)

Type 16. Subject+Ba+Object+Verb+ Shang/Xia... (+Place word) + Lai/Qu

Type 2. Subject + Verb + Simple DC (Extended Meaning)

Type 13. Subject+ Verb + Compound DC+ Object (Directional Meaning)

Type 7. Subject+ Verb + Compound DC (Directional Meaning)

Type 3. Subject + Verb+ Object + Simple DC (Directional Meaning)

Type 8. Subject+ Verb + Compound DC (Extended Meaning)

Type 11. Subject+ Verb + Compound DC1+Object+ Compound DC2 (Directional Meaning)

Type 4. Subject + Verb+ Object + Simple DC (Extended Meaning)

Type 10. Subject+ Verb + Object+ Compound DC (Extended Meaning)

It reveals several findings. First, like the beginner group, intermediate and advanced participants had better comprehension performance of DCs in most cases. This finding agrees with the findings that Qian (1997) reported. She claimed that the comprehension competence was always developed prior to expression competence when the L2 learners acquired a grammar. However, in some cases, there were big gaps between the comprehension and expression. For example, their comprehension performance of type 12 was much worse than the expression. In the comprehension question on type 12, the verb “认” is not the familiar verb combined with “出来” for L2 learners, because “想出来/想起来” were introduced to them as an entirety in their



textbooks. When the familiar verb changed, the L2 learners were unable to find the DC to combine with the new one. Introducing “Verb + DC” as entirety might be a convenient way while we teach the extended meanings of DCs. But in L2 learners’ eyes, the DCs are no longer complement in the construction, and the extended meaning of DCs are not acquired. Another gap is about type 2. It reflects the influence from interlingual transfer. In English, “up” is related to the higher point. However, when its Chinese counterpart “上” work as a simple DC, it can indicate the surface contact between two objects. L2 learners who did not notice this difference produced errors. The comprehension performance of type7 and type3 were better than their expression performance. L2 learners were able to choose the correct DCs in the comprehension section. However, when they did the translation, they produced many misordering errors.

Second, many DCs with extended meanings had higher accuracy than those with directional meanings. In the acquisition sequence constructed by Qian (1997), the acquisition of DC patterns with extended meanings lagged behind the DC patterns with directional meanings. But Yang (2004) claimed that some DC patterns with directional meanings were much more difficult than those DC patterns with extended meanings. According to his corpus data, “Verb+DC1+Object+DC2 (Extended Meaning)” had no error at all levels, while the error rate of “Verb+DC1+Object+DC2 (Directional Meaning)” was very high at the beginner level and the advanced level. Another example was the “Verb +Simple DC +Object (Directional Meaning)” had higher error rate than “Verb +Simple DC +Object (Extended Meaning)” at the intermediate and advanced levels. These two phenomena that Yang (2004) pointed out also be found in the Table 12. In Table 12, Type 12 had higher average accuracy than Type 11, and Type 5 had higher

error rate than Type 6.

Third, the acquisition sequence was barely influenced by the type of DCs. Comparing the accuracy rate of simple DCs and compound DCs, we found that some compound DC patterns had higher accuracy rate than some simple DC patterns. For example, Type 9 had much higher accuracy rate than Type 3.

Fourth, comparing to Table 11, the result shows that, the average accuracy of some DC patterns with directional meanings increased at the intermediate and advanced level, such as Type 1, Type 5, Type 9, Type 13, and Type 15. However, some patterns became worse, such as Type 3, Type 7, and Type 11. And the accuracy of Type 3 was low at all level.

Selinker (1972) suggested that the most important distinguishing factor related to L2 acquisition is the phenomenon of fossilization. He explained that “fossilizable linguistic phenomena are linguistic items, rules, and subsystems which speakers of a particular native language will tend to keep in their interlanguage relative to a particular target language, no matter what the age of the learner or amount of explanation or instruction he receives in the target language” (Selinker, 1972).

The Type 3 was a typical fossilization phenomenon. The error about this type in the translation section ranked Top1 at all level.

In English, the counterpart of Chinese DC is adverb or verb. The English adverbs which can convey DC meanings are limited, they include, up (上、上来、上去), away (离开), down / off (下、下来、下去), in / into (进来、进去), out(出来、出去, 上, 起来), back( 回来、回去), on( 下去-extended meaning), to( 去), and over / past / across( 过/过去).(Liu, 2013)

“She wants to go back to China.” In this sentence, the Chinese equivalent of the word "back" is 回去. When the object is a place noun or phrase, it has to go between the verb and 来/去. However, in English, the place noun should follow “back”. Therefore, this interlingual transfer might be the cause of the error.

## CHAPTER 5

### PEDAGOGICAL IMPLICATIONS

#### 5.1 The Evaluation of Textbook Presentation

Textbook is an important material for both teacher and learner. It is the bond between the second language teaching and acquisition. The compilation of the textbook has five characters: pertinency, practicability, scientificity, interesting and systematicness. The selection and the reasonable arrangement of the grammars is a significant sign of scientificity. The current teaching system of grammar is based on the *Hanyu jiaoke shu* which was published in 1958. In the past several decades, with the development of teaching pedagogy, teaching contents have been changing, and the whole system of teaching grammar has been improved as well. Nowadays, when we consider the selection of grammar, there are two key points: one is filtering the basic, necessary grammar constructions through scientific frequency analysis. The other is choosing the topic, vocabulary, and grammar that are most appropriate for communication. (Lü, 1999)

The textbooks the participants used are Integrated Chinese series (Liu and Yao, 2008). In this series, the introductions of Chinese DC are arranged as follows:

(1) *lai* 来: Verb + Simple DC (Directional Meaning)

In Lesson 5, Level 1 Part 1, *lai* 来 is the first Chinese DC appears in the context, its meaning in the vocabulary list is described as “VC. To Come in”.

(2) *qu* 去: Subject + Verb+ Object+ Simple DC (Directional Meaning)

In Lesson 6, Level 1 Part 1, *dao...qu* 到...去 appears in the dialogue1. The meaning of *qu* is introduced in Lesson 4 as a verb “to go”. In Lesson 6, there is no further explanation about the simple DC *qu*.

### (3) Verb + Simple DC (Directional Meaning)

In the grammar section of Lesson 6, Chinese DCs with directional meanings are introduced formally for the first time. Due to the limitation of characters that the beginners have learned, the textbook merely mentions two simple DCs, they are lai 来 and qu 去. The introduction of these two DC is quite simple:

(lái/qù, to come/go) can serve as a directional complement after such verbs as 进 (jìn, to enter) and 回 (huí to return). 来(lái, to come) signifies movement toward the speaker, while 去 (qù to go ) signifies movement away from the speaker.

After this general explanation, the textbook gives one conversation as an example.

A: 你什么时候回来?

Nǐ shénme shíhòu huí lái.

When are you coming back?

B: 我六点回去。

Wǒ liù diǎn huí qù.

I'm going back at six.

Although, “Subject + Verb + Object + Simple DC (Directional Meaning)” appears in the same lesson, the textbook doesn't mention this construction in the grammar introduction.

### (4) *qilai* 起来: indicating the beginning of an action

When *qilai* is introduced as a sign which indicates the beginning of an action in Lesson 15, Level 1 Part 2, the textbook use these two DC constructions:

- a. Subject+ Verb + Compound DC (Extended Meaning):

我们一见面就聊起来。

Wǒmen yí jiàn miàn jiù liáo le qǐ lai.

We began chatting as soon as we met.

- b. Subject+ Verb + Compound DC1+Object+ Compound DC2 (Extended Meaning)

他一回家就写起信来。

Tā yì huí jiā xiě qǐ xìn lai.

He began to write a letter as soon as he got home.

(5) In Lesson 16, Level 1 Part 2, Chinese DCs with directional meanings are introduced again as an important grammar. The definition of Chinese DCs has more details:

Directional complements indicate the direction in which a person or object moves. A directional verb such as 上, 下, 进, 出, 回, 过, 起, 开, 到, 来, 去 can be placed after another verb to become what is known as a “simple directional complement.” When a simple directional complement such as 上, 下, 进, 出, 回, 过, 起, 开 or 到 is combined with 来 or 去, we have what is called a “compound directional complement”.

In this lesson, many patterns are introduced at the same time, including:

- a. Subject + Verb +Place Word/Noun Phrase+ lai/qu  
b. Subject + Verb + shang/xia ...+ Place Word/Noun Phrase

- c. Subject + Verb + shang/xia ...+ Place Word/Noun Phrase+ lai/qu
- d. Subject + Verb+ shang/xia ...+lai/qu + Noun Phrase
- e. Subject + 把+ Object +Verb + lai/qu
- f. Subject+把+ Object + Verb + shang/xia ...+Place Word+ lai/qu

Moreover, the restrictions of the object's position and the differences between shang and qi are introduced as well.

(6) *xiaqun* 下去: indicating continuation

In Lesson 18, Level 1 Part 2, xiaqu 下去 is introduced as a sign of continuation.

(7) DC suggesting result

In Lesson 8, Level 2 Part 1, DCs with extended meanings are systematically introduced for the first time. The textbook says:

Many directional complement do not actually deal with direction in a literal sense, but rather suggest a result or state of being.

The textbook presents several examples, such as:

a. 从本子上撕下一张纸来。

Tear a piece of paper from the notebook.

b. 我看出来他生气了。

I could tell that he got angry.

(8) *qilai* 起来: indicating the beginning of an action

In Lesson 10, Level 2 Part 1, qilai 起来 is introduced again. The textbook emphasizes that the object must be between qi 起 and lai 来. It also introduces the adjective

+ qilai 起来 and adjective + xialai 下来.

(9) *guolai/guoqu* 过来/过去: complement

In Lesson 15, Level 2 Part 2, *guolai* 过来 is introduced. The textbook says it can express a resultative meaning: a return to a normal active state. *Guoqu* as the opposite of *guolai* is briefly mentioned at last.

(10) *xiang qilai/xiang chulai* 想起来/想出来:

In Lesson 16, Level 2 Part 2, *xiang qilai/xiang chulai* 想起来/想出来 are introduced together.

These findings show that the presentation of Chinese DCs in Integrated Chinese series follows some rules. First, simple DCs and the directional meanings of DCs are introduced at the beginning, while most of the compound DCs and the extended meaning of DCs appear later. Second, emphasizing the connection between DCs and 把 construction. Third, the restrictions of the position of the object are always underlined.

This presentation of Chinese DCs is reasonable. At the beginner level, students need to learn the survival Chinese, such as visiting friends and asking direction. These settings require the usage of DCs with directional meanings. Besides, ba construction is an acknowledged difficulty. As a significant part of ba construction, DCs influence the acquisition of ba construction. Therefore, the introduction of two DC patterns with “ba” is necessary. In addition, misordering is a very common error of DCs (Li, 1999 & Wu, 2002). Emphasizing the restrictions about the position of the object is important.

However, there are some deficiencies of the presentation of DCs in this textbook series.

First of all, the introduction of the DCs with directional meanings in Lesson 16,



Level 1 Part 2 is inappropriate. In one lesson, the introduction includes definition of DCs, classification of DCs, 6 DC patterns, difference between *shang* 上 and *qi* 起, and several restrictions about the position of the object. It is overwhelming for the lower-intermediate level learners.

Second, as a DC with extended meaning, *qilai* 起来 is introduced repeatedly. In Lesson 15, Level 1 Part 2, *qilai* 起来 is introduced as a sign which indicates the beginning of an action. In Lesson 10, Level 2 Part 1, *qilai* 起来 is introduced as the sign which indicating the beginning of an action again. There is no point in duplicating work already done.

Third, according to the statistics of native Chinese speakers' usage of DCs in the previous chapter, "Subject + Verb + Object + Simple DC (Directional Meaning)" is a barely used pattern. However, the introduction of this pattern appears early in Lesson 6, Level 1 Part 1. It is also presented as an important patterns in Lesson 16, Level 1 Part 2.

Moreover, "Subject+ Verb + Compound DC1+Object+ Compound DC2 (Extended Meaning)" is another low-frequency DC pattern, but it is introduced at the very beginning as well. These low-frequency DC patterns should be introduced later.

## **5.2 The Implications to Teaching**

Teaching arrangement of Chinese DCs should take the usage rate and the acquisition sequence into account. Based on the data analysis in the previous chapters, there are some rules that instructor should follow:

(1) Type 1, Type 6, Type 5, Type 15 and Type 16 are the DC patterns used by native speakers more frequently, and L2 learners' performance of these types is better. Therefore, these patterns can be introduced early.

(2) The pattern with the object comes right after DC is easier for the L2 learner, because the learners prefer to using “Verb + DC” as an entirety. And due to the complicated restriction of the position of the object, the patterns with the object goes prior to DC, such as Type 4, Type 9, Type 10 should be introduced later.

(3) DCs with extended meanings might be introduced at the beginner level. For example, according to the statistics of native Chinese speakers’ usage of DCs in the previous chapter, “Subject + Verb + Simple DC+ Object (Extended Meaning)” is a very popular DC pattern. It ranks top2 of all DC patterns. Meanwhile, the L2 learners’ comprehension and expression performance of this pattern is great as well. Therefore, it is reasonable to introduce this pattern earlier.

(4) Besides the syntactic construction, the semantic classification also influence the acquisition of Chinese DCs. For example, “up” can be subdivided into two categories in Chinese: *shang* 上 and *qi* 起. *Shang* conceptually highlights the region where the moving figure will be located after moving, whereas *qilai* merely indicates the moving is from low place to high place, there is no destination of the moving figure or the destination cannot be located. Native Chinese speakers are sensitive to the distinction between *shanglai* and *qilai*, because learning the language as an L1 has trained them to be so. However, the survey shows us that interlingual errors occurred while the L2 learners didn’t know how to reclassify “up” to the related spatial concepts in Chinese. They made sentences such as: “我把笔捡上来.” Therefore, when DCs are introduced to English learner of L2 Chinese, the introduction of DC patterns are not enough. The instruction should notice the impact comes from the semantic classification.

(5) Reviewing the old grammar is as important as introducing the new ones.

The error analysis shows that the long term persistence of plateaus of non-target-like constructions in the interlanguage of non-native speakers does exist in the acquisition process of Chinese DCs. From the beginner level to the advanced level, L2 learners produced the same errors, such as “她想回去北京”, “我把笔拿上来” and “请搬你的书桌在这儿”. These fossilization phenomena ring the bell for the instructor. While introducing the new DCs, it is necessary to review the old ones. The restrictions of the object’s position, the ways to distinguish the semantic differences, and the new spatial concepts cannot be digested by L2 learners in a short term.

## CHAPTER 6

### THE CONCLUSION AND LIMITATION

#### 6.1 The Conclusion

This paper adopted second language acquisition hypotheses and research methods to investigate how second-language Chinese learners acquire Chinese DCs. It included two main parts: a corpus study and a questionnaire survey.

According to the multiple classification method created by Xiao and Zhou (2009), we combined with two important ba patterns with Chinese DCs in the participants' textbook, and then divided Chinese DC patterns into 16 types.

The data collected in the corpus study show that L2 learners at intermediate and advanced level tended to use Chinese DCs with extended meanings. Moreover, they preferred to combine verbs with Chinese DCs as an entirety rather than placing the object between verb and Chinese DC. However, the data were not enough to draw a whole picture of the acquisition of Chinese DCs.

In order to find out the error distribution and the acquisition sequence of DCs, a questionnaire survey were distributed to L2 learners and native speakers.

The error analysis shows that omission errors of Chinese DC accounted for the largest percentage, the proportions of misordering errors and Misuse errors were very close, and addition errors were few.

Through the data analysis, we got the average accuracy and the usage rate of each DC type. A relative acquisition sequence was constructed based on accuracy rate and the usage rate. This acquisition sequence reflects several phenomena: 1) the position of the object influenced the acquisition significantly; 2) some errors were caused by interlingual

transfer 3) Chinese DCs with extended meanings were easier than Chinese DCs with directional meanings in some cases; 4) the type of Chinese DC was not an important factor to the acquisition sequence; 5) the comprehension competence was better than the expression competence at all level; and 6) Some DC patterns' average accuracy increased at the intermediate and advanced level, however, certain error of DCs were fossilization.

The presentation of the DCs in the textbook can impact the acquisition. Therefore, we evaluate the presentation of Chinese DCs in participants' textbooks. The general presentation order is reasonable. However, there are some deficiencies, such as overwhelming introduction in one lesson, repeating introduction of the same DC, and so on. At last, some implications to teaching Chinese DC are provided based on the findings in previous chapters.

## **6.2 The Limitation**

Although the review of the previous studies and the pilot-test did eliminate certain weaknesses, there are some limitations of the present study that exert negative influence on the reliability of the results.

First of all, the natural materials were limited. They came from the compositions in the final exams. It is possible that the participants only used the grammars they feel comfortable to use under the pressure. Certain Chinese DCs might be avoided in their compositions on purpose. The more natural materials are weekly journal and other writing samples assigned to them as homework, since learners have more sufficient time and relaxing environment to complete them.

Second, the questionnaire which consisted of multiple choice and translation had focused on the semantic and syntactic complexity of the target DC patterns, and over

looked the differences exist in spatial categorization and conventionalized way of path encoding between native speaker and L2 learners. The future researchers may use some picture-cued written tasks to investigate this unsolved problem.

Thirdly, the small number of participants also impacted the results. There were only 82 L2 learners and 15 Chinese native speakers took part in the questionnaire survey on Chinese DCs. To make the results more statistically significant, the future researchers need to look for more participants.

Fourthly, the questionnaires were distributed to L2 participants during the regular classes. Therefore, it is possible that they were not given enough time to complete the whole survey.

Finally, although the questionnaire includes the background investigation of each participant, in the present study the researcher did not compare the different performance between heritage learners and non-heritage learners. It is necessary to take this problem into account later, since many previous studies showed that heritage learners had their own way to learn Chinese as a second language.

To sum it up, Chinese DC is a really difficult grammar for L2 learners due to its complexity and variability. More investigations in this line of research are needed so as to better understand how we can facilitate the acquisition of Chinese DCs.

## APPENDIX A

### QUESTIONNAIRE FOR LEARNER

Dear student,

In this anonymous questionnaire we ask questions about your knowledge on Chinese Directional Complements. Your responses will provide important data for improving our teaching. Please fill out this questionnaire and return it to your teacher.

Thank you for your thoughts and time.

#### Part 1: student background information

Q1. What is your gender? ☐ Male ☐ Female

Q2. What is your native language? \_\_\_\_\_

Q3. Check if your family members or anyone else you have lived with is a native speaker of Chinese. (If none, skip Q3&Q4)

☐ Mother ☐ Father ☐ Grandma ☐ Grandpa ☐ Other (specify) \_\_\_\_\_

Q4. Do you speak Chinese with him/her ☐ NO ☐ Yes \_\_\_\_\_ (Frequency)

Q5. If you have studies Chinese before (including courses taken at weekend/evening Chinese school), list the following information:

School	Course	hour/week
_____	_____	_____
_____	_____	_____

Q6. Have you lived/stayed in China before?

☐ No ☐ Yes [For \_\_\_\_\_ (length of the stay)]

Q7. How much time do you spend in studying Chinese now? \_\_\_\_\_

Q8. Do you have any difficulty in this course?

☐ No ☐ Yes \_\_\_\_\_

Q9. How do you evaluate your Chinese level? (Please use Very Poor/Poor/Fair/Good/Very Good to describe.)

Listening \_\_\_\_\_ Speaking \_\_\_\_\_ Reading \_\_\_\_\_ Writing \_\_\_\_\_

Part 2: Multiple Choices (Please choose the most appropriate answer.)

- ( ) 1. 我一叫他, 他就跑\_\_\_\_\_了。  
A.过 B.出 C.到 D.来
- ( ) 2.那个房间的门关\_\_\_\_\_了。  
A.上 B.下 C.开 D.去
- ( ) 3.他生病了, 我给他送药\_\_\_\_\_。  
A.上 B.去 C.到 D.过
- ( ) 4. 他又高又大, 我打他不\_\_\_\_\_。  
A.去 B.来 C.过 D.回
- ( ) 5.王朋走\_\_\_\_\_宿舍。  
A.过 B.起 C.开 D.进
- ( ) 6.他弟弟考\_\_\_\_\_了大学。  
A.下 B.出 C.起 D.上
- ( ) 7. 同学们从教室里面走\_\_\_\_\_。  
A.上来 B.出来 C.起来 D.进来
- ( ) 8.老师给他讲了好几次, 他才明白\_\_\_\_\_。  
A.过去 B.出来 C.过来 D.开去
- ( ) 9.她住的地方离这里很远, 你能送她\_\_\_\_\_吗?  
A.开去 B.上去 C.进去 D.回去
- ( ) 10. 这是一张白纸, 你画一朵花\_\_\_\_\_吧。  
A.下来 B.出去 C.上去 D.过去
- ( ) 11.原来你也要去图书馆, 那我们一起走\_\_\_\_\_图书馆\_\_\_\_\_。  
A.到...去 B.过...去 C.下...去 D.开...去
- ( ) 12.不好意思, 我没有认\_\_\_\_\_你\_\_\_\_\_。  
A.起...来 B.上...来 C.出...来 D.过...来
- ( ) 13.这里少了一张桌子, 所以他搬\_\_\_\_\_一张桌子。  
A.下去 B.开来 C.起来 D.过来
- ( ) 14.我想\_\_\_\_\_一个办法。  
A.过去 B.出来 C.进来 D.上来
- ( ) 15.明天上课的时候, 请记得把你的书拿\_\_\_\_\_。  
A.下 B.过 C.来 D.起
- ( ) 16.快把车开\_\_\_\_\_家\_\_\_\_\_。  
A.回...去 B.过...去 C.上...来 D.下...去



**Part3.Translation (You could use Pinyin, if you forgot the character.)**

- 1. Xiao Ming, come in!**
- 2. There is nothing left.**
- 3. She wants to go back to China.**
- 4. I am so angry at him. He forgot my birthday again.**
- 5. Xiao Ming walked across the first intersection.**
- 6. He fell in love with his classmate.**
- 7. That girl went over there.**
- 8. My stomach starts to hurt.**
- 9. I'll be waiting for him here. You go and get him over here.**
- 10. Please cut a piece of cake.**
- 11. He went downstairs.**
- 12. They started to sing.**
- 13. I took out a coat.**
- 14. She just recalled a thing.**
- 15. Please move your desk here.**
- 16. I picked up the pen.**

## APPENDIX B

### QUESTIONNAIRE FOR NATIVE CHINESE SPEAKER

Dear Friend,

In this anonymous questionnaire we ask questions about your knowledge on Chinese Directional Complements. Your responses will provide important data for improving our teaching.

Thank you for your thoughts and time.

Gender\_\_\_\_\_ Education Level\_\_\_\_\_ (college, graduate)

Q1.What is your native language? \_\_\_\_\_

Q2.What other languages do you know? \_\_\_\_\_

Q3.When did you start to learn Mandarin Chinese? \_\_\_\_\_

Q4.Where did you begin to learn Mandarin Chinese? \_\_\_\_\_

Q5.Do you know English? \_\_\_\_\_?

Q6.How long have you been learning (and/or speaking) English? \_\_\_\_\_

Q7.What is your primary language in communicating with people everyday?

\_\_\_\_\_

Q8. How long have you been in the United States (or any other English speaking country)?

\_\_\_\_\_

Q9. Can you speak any Chinese dialect(s)? (If no, skip10)

☐ No ☐ Yes, I can speak\_\_\_\_\_

Q10. How do you evaluate your dialect(s) level? (Please use Very Poor/Poor/Fair/Good/Very Good to describe.)

Listening \_\_\_\_\_ Speaking\_\_\_\_\_

Part 2: Multiple Choices (Please choose the most appropriate answer.)

- ( ) 1. 我一叫他, 他就跑\_\_\_\_\_了。  
A.过 B.出 C.到 D.来
- ( ) 2.那个房间的门关\_\_\_\_\_了。  
A.上 B.下 C.开 D.去
- ( ) 3.他生病了, 我给他送药\_\_\_\_\_。  
A.上 B.去 C.到 D.过
- ( ) 4. 他又高又大, 我打他不\_\_\_\_\_。  
A.去 B.来 C.过 D.回
- ( ) 5.王朋走\_\_\_\_\_宿舍。  
A.过 B.起 C.开 D.进
- ( ) 6.他弟弟考\_\_\_\_\_了大学。  
A.下 B.出 C.起 D.上
- ( ) 7. 同学们从教室里面走\_\_\_\_\_。  
A.上来 B.出来 C.起来 D.进来
- ( ) 8.老师给他讲了好几次, 他才明白\_\_\_\_\_。  
A.过去 B.出来 C.过来 D.开去
- ( ) 9.她住的地方离这里很远, 你能送她\_\_\_\_\_吗?  
A.开去 B.上去 C.进去 D.回去
- ( ) 10. 这是一张白纸, 你画一朵花\_\_\_\_\_吧。  
A.下来 B.出去 C.上去 D.过去
- ( ) 11.原来你也要去图书馆, 那我们一起走\_\_\_\_\_图书馆\_\_\_\_\_。  
A.到...去 B.过...去 C.下...去 D.开...去
- ( ) 12.不好意思, 我没有认\_\_\_\_\_你\_\_\_\_\_。  
A.起...来 B.上...来 C.出...来 D.过...来
- ( ) 13.这里少了一张桌子, 所以他搬\_\_\_\_\_一张桌子。  
A.下去 B.开来 C.起来 D.过来
- ( ) 14.我想\_\_\_\_\_一个办法。  
A.过去 B.出来 C.进来 D.上来
- ( ) 15.明天上课的时候, 请记得把你的书拿\_\_\_\_\_。  
A.下 B.过 C.来 D.起
- ( ) 16.快把车开\_\_\_\_\_家\_\_\_\_\_。  
A.回...去 B.过...去 C.上...来 D.下...去

**Part3.Translation (You could use Pinyin, if you forgot the character.)**

- 1. Xiao Ming, come in!**
- 2. There is nothing left.**
- 3. She wants to go back to China.**
- 4. I am so angry at him. He forgot my birthday again.**
- 5. Xiao Ming walked across the first intersection.**
- 6. He fell in love with his classmate.**
- 7. That girl went over there.**
- 8. My stomach starts to hurt.**
- 9. I'll be waiting for him here. You go and get him over here.**
- 10. Please cut a piece of cake.**
- 11. He went downstairs.**
- 12. They started to sing.**
- 13. I took out a coat.**
- 14. She just recalled a thing.**
- 15. Please move your desk here.**
- 16. I picked up the pen.**

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